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ABSTRACT

Theories of racial and ethnic relations have been plentiful, but the empirical testing of hypotheses has not led to a cumulative growth of knowledge. As yet, no strong paradigm of research has emerged. The growth of empirical studies of racial/ethnic inequality in the United States over the last decade suggests that formal models of the process of stratification may be a significant turning point in the development of the field. Not only do such models offer a rigorous statistical method of analysis, but a cumulative research tradition seems to be developing. The expansion of models to include social origins and the temporal ordering of the socioeconomic career required specification and interpretation of how ethnic inequality is generated and transmitted across and within generations. The two major frontiers of research on ethnic stratification within cumulative research strategy are trend and compartive analysis. Trend analysis speaks to the question of whether there is a growing convergence in ethnic stratification, while comparative analysis specifies certain attributes of the social structure of geographical areas which may affect the levels and processes of ethnic stratification. (Author/WI)

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THEORIES AND MODELS OF ETHNIC INEQUALITY

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THEORIES AND MODELS OF ETHNIC INEQUALITY

INTRODUCTION

Beginning with the seminal work of Robert Park (1950), there have been numerous efforts to develop sociological theories to classify and explain the variations in ethnic (and racial[2]) inequality over time and space. Yet it is apparent to even the novice that there is no single paradigm that dominates the field. Research findings accumulate, but rarely seem to lead to systematic and cumulative empirical generalizations, nor do theoretical propositions guide most research on the topic (Blalock 1967). While research traditions do exist, they are more likely to center on the type of data used (observation, census data, or surveys). In this paper, I review the development of a school of research that may be emerging as a paradigm for studies of ethnic inequality. I try to show that extensions of what might be called "models of ethnic stratification" can speak to some of the classic theoretical questions of changes and variations in systems of ethnic inequality. Before reviewing the development and directions of this emerging school, I will briefly note some of the limits of earlier perspectives.

The well known race relations cycle of Robert Park (later developed and elaborated by E. Franklin Frazier 1957) was based on a universal sequence of stages of inter-ethnic relations, beginning with contact, leading to competition, followed by a period of stable accommodation, and an eventual process of assimilation. Park's bold formulation of a natural history of ethnic relations was probably the closest approximation to a paradigm of sociological research on race and ethnic relations.

It spawned a series of studies by Park's students and others to fit the theory to the empirical world. But the fit was poor in most cases, and a number of conceptual problems regarding the identification of stages and the transitions between stages led to impasse in further research (Lyman 1968).

Other sociologists, most notably Barth and Noel (1972), Lieberson (1961), Noel (1968), Schermerhorn (1970), Shibutani and Kwan (1965), and van den Berghe (1967) have put forth theories, most generally in the form of typologies, to order the field of race and ethnic relations. But it seems fairly clear that none of these theoretical perspectives have become paradigms in the sense of leading a dominant research tradition. The basic handicaps of these different perspectives are the difficulties of operationalizing the basic concepts and of finding appropriate data to test emergent hypotheses. In general, most theoretical perspectives are couched in fairly abstract terms and key relationships are illustrated with examples from a few societies. What is to be explained --inter-ethnic stratification, political or economic dominance, assimilation or lack of it varies considerably between studies, and these quite different dimensions are often used interchangably as though all co-vary together.

The basic kernal of most macrosociological theories of ethnic inequality is that the type and organization of society shape the structure of ethnic relations. And as societies are transformed in various ways, ethnic relations are posited to change or evolve in certain directions. Other factors such as the relative size of majority and minority groups, the nature of the encounter (migration, conquest), and initial distribution of power (military, economic) are additional contingencies that

affect the outcome. How to put all these ideas into a systematic framework to guide research is an awesome task. First of all, the lack of comparable data for historical-comparative research is enough to deter all but the most gifted or foolhardy investigators. Moreover, what are the dimensions or characteristics of societies that might shape ethnic structures? Is it industrialization, the type of polity, who owns the means of production, Western tradition or racism that are the key to the puzzle? It is safe to say that no consensus has emerged, and the field remains eclectic in its orientation.

From this rather pessimistic review of the state of theory development on ethnic relations, it may seem a bit incongruous to offer some new wisdom on the matter. However, my objective is considerably more modest than previous attempts to bring coherence to this disparate field. It is simply to review and suggest possible extensions of some of the recent work on "models" of ethnic inequality that has emerged from studies of social stratification in the last 10 years or so. Such models are not really theories in the mold of linking social structure and ethnic relations, as did those discussed in the previous paragraphs. Indeed the framework has been exceedingly narrow, basically measuring and interpreting inter-ethnic socioeconomic inequality, typically in terms of income, occupation, and education. The interpretation is founded on causal models, estimated with multivariate regression techniques, that measure how social background characteristics affect differential socioeconomic achievement. While most of the work to date has not spoken to the broad issues raised by the classic theories, there are clear signs of an emergent paradigm. Furthermore, the widening scope of empirical studies using the basic model of ethnic inequality is leading in directions

that address some of the broader questions of the linkages between social change, social organization, and ethnic inequality. These topics will be addressed in the following review of models of ethnic inequality.

PRE-MODEL FORMULATIONS

It has always been tempting to interpret measures of ethnic inequality as indicators of discrimination, the degree to which members of disadvantaged groups are confined to a subordinate position solely on the basis of their ascribed status—race or ethnicity. Yet apologists for the existing social order could simply argue that ethnic disparities were due to differences on other criteria that determined socioeconomic success such as education, mental ability, or minority concentrations in depressed geographic areas. Thus, there was (and remains) a great scientific interest in measuring what fraction of ethnic inequality is due to discrimination. Perhaps the single most influential article along these lines was Paul Siegel's (1965) "On the Cost of Being a Negro." Using the standard statistical methods of controlling for population composition between two populations (Kitagawa 1955; Althauser and Wigler 1972), Siegel was able to estimate how much of the gross income differences between white and black men in the United States would remain if both races had exactly the same distributions by region of residence, education, and occupation. His results showed that most of black-white income inequality was not due to differences in occupation, education, or region, but something else--most likely discrimination. Of course, one might argue that differences in education, occupation, and region (the control variables) are also related to discrimination. Nonetheless, this study presented a basic, though somewhat cumbersome, analytic framework for the interpretation of ethnic inequality.

Another pioneering study along these lines was Lieberson and Fuguitt's (1966) application of Markov chain techniques to estimate the separate effects of social origins and social mobility on black-white occupational differences. By noting that differences in the distribution of black and white men by occupation can be algebratically separated into vectors of social origins (father's occupation) and a matrices of mobility (from father's to son's occupation), it is possible to hold one factor constant and vary the other. Lieberson and Fuguitt discovered that black-white occupational inequality would virtually disappear in a couple of generations if discrimination were to be eliminated (equivalent mobility matrices).[3] Clearly discrimination, indexed by unequal achievement even with equal backgrounds, has long been active in American society.

These basic questions of the differential effects of social background variables and the residual differences between ethnic groups due to discrimination can more formally be addressed in multiple regression models of social stratification.

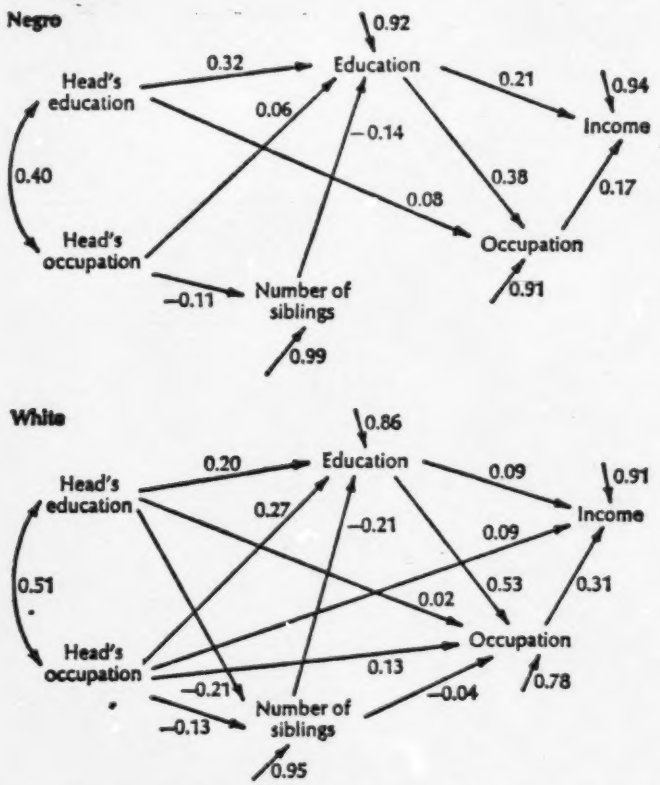
BASIC ETHNIC STRATIFICATION MODELS

The recent development of models within the field of social stratification can be dated from 1967 with the publication of Blau and Duncan's The American Occupational Structure. By transposing the question of social mobility into a multivariate analysis of the socioeconomic life cycle with the aid of statistical/theoretical technique of path analysis (Duncan 1966), a new school of social research emerged. This new school could not do everything, and indeed, many of the classic questions of social stratification were beyond its purview. But the study of the impact of parental socioeconomic status upon son's socioeconomic position--the question of social mobility— was broadened and reinvigorated.

Perhaps the major contribution of the new stratification school was the possibility for the accumulation of knowledge via replication and extension of the basic models. The statistics of multiple regression allow for the incorporation of additional independent variables, but the rigor of path models required that the relationship of each new independent variable to all other variables be posited in advance and interpreted in a causal framework. Since the notion of the socioeconomic life cycle provides a temporal ordering of most variables, this was not a major obstacle. Duncan and his students were keenly aware of the possibilities for extension of the basic stratification model to include many other relevant variables (Duncan, Featherman, Duncan 1972). These early studies included analyses of the factors accounting for inequality between blacks and whites (Blau and Duncan 1967, chapter 6; Duncan 1969) and among other American ethnic groups (Duncan and Duncan 1968). The application of models of the integenerational process of stratification to ethnic inequality made for a more thorough investigation of the questions raised in the Siegel and Lieberson-Fuguitt analyses, yet also raised some new issues. This can be most clearly seen in the models and analysis presented in Duncan's (1969) classic article "Inheritance of Poverty or Inheritance of Race."

The path diagrams in Figure 1 show the basic model of the socioeconomic life cycle separately for black and white men based upon the 1962 Occupational Change in a Generation Survey data (see Duncan 1969 for more detail). This schematic presentation of the results of multiple regression equations with coefficients in standardized form is designed to facilitate causal interpretation. Straight lines indicate unidirectional

Figure 1 Models of Stratification Among Black and White Men, Based Upon 1962 Occupational Change in a Generation (OCG) Survey.



Original Title: FIGURE 4-1. Path diagrams representing a model of the socio-economic life cycle in the Negro and white populations, with path coefficients estimated for native men 25 to 64 years old with nonfarm background and in the experienced civilian labor force: March 1962.
SOURCE: Computed from data summarized in Table 4-2; path is omitted when coefficient is less than its estimated standard error in absolute value.

Source: Otis Dudley Duncan 1969, P. 90.

causal lines, while curved lines represent unanalyzed joint associations between exogenous variables. What is immediately obvious from this form of presentation (that is not in the usual multiple regression analysis) is that outcome variables are dependent not only on direct (or net) effects from prior variables but also upon indirect effects that are mediated by intervening variables. Thus the "model" (it need not be of a path analysis type) uses the statistical techniques to test the causal/theoretical framework, not visa-versa.

Since my intention here is exposition of an approach, not interpretation of substance, I will not elaborate upon the content of Figure 1. It shows the relationships between socioeconomic background and socioeconomic attainment among black and white men. But it does not directly address the handicap of black men in the American stratification system. This requires combining the information on differential racial translation of background into attainment (standardized regression coefficients in Figure 1) but also the racial differentials in socioeconomic background resources. Duncan ties these together in statistical "experiments" by controlling the racial inequality in various social background variables, such as father's education, father's occupation, etc., and observing the effects upon racial inequality in attainment (black means on background variables are entered into the regression equations for whites). he concludes that the major source of racial inequality is not the poorer social background or education of blacks, but the poorer rewards that society provides blacks with equivalent backgrounds and qualifications as whites. Thus it is not the "inheritance of poverty" that most limits the socioeconomic succes of blacks, but the recurrent discrimination that each successive generation encounters (inheritance of race).

Duncan's clear exposition of how to "model" and interpret racial/ethnic differences in stratification has greatly influenced contemporary studies of this topic. But some observers have pointed out that the statistical decomposition of racial/ethnic inequality using regression techniques actually leads to more complexity than Duncan's neat interpretation suggests (Winsborough and Dickinson 1971; Althauser and Wigler 1972). Specifically, decomposition procedures can reveal at least four empirical factors: (1) inequality due to differences in social background, e.g., means on independent variables, (2) differences in slopes, the regressions of the dependent variables on the independent variables, (3) differences in the intercept values, whose value is constant over all categories of the independent variables (basically the residual term), and (4) statistical interactions between race and other relationships in the model. The problem is that these factors are not necessarily conceptually or empirically distinct. Recall that the original objective underlying these basic investigations was to separate inequality into two interpretable factors: those due to discrimination, and those due to other factors. As noted earlier, differences in social background (composition in Siegel's work and means on independent variables in the regression models) may actually be due to the legacy of discrimination from earlier generations. But the other components are problematic in their interpretation as well.

While it might be useful to label <u>intercept differences</u> as discrimination that affect all members of the disadvantaged groups and <u>differences in slopes</u> as discrimination as unique to those with specific values on the independent variables, the empirical distinction between these terms in any

analysis is partially a function of the assignment of a zero value on the independent variables. The statistical "interaction" appears in the different component solutions, depending on which standard population is used in equations in the statistical experiments (Althauser and Wigler 1972). In Duncan's analysis the interaction component is averaged into one or more of the other components. Winsborough and Dickinson (1971) show how to estimate it separately, but its interpretation remains opaque.

A statistically equivalent method of the basic model of ethnic inequality is to run ethnic/race categories as separate variables (as dummy variables in binary coding) in a single equation (Duncan and Duncan 1968; Duncan and Featherman 1972; Hirschman 1975). The typical sequence of analytical steps in this procedure is somewhat different than in Duncan's example. A brief illustration of the series of basic equations in such an analysis might best convey the ideas and techniques that are part of the process of model building.

First, a basic equation with only the dependent variable regressed upon the categories of the ethnic variable is estimated.

$$Y = a + b_1 E \qquad (1)$$

where Y is an occupational attainment variable, measured in an interval scale and E represents a series of dummy variables, one for each category of the ethnic/race classification. The associated regression coefficients, represented by b_1, would be the gross effects of ethnicity on occupational attainment. These coefficients can be adjusted to deviations from the grand mean of the dependent variable, and thus would be exactly the same as differences between the average occupational attainment of each ethnic group. This simple model is then expanded to include other background

variables such as Father's Occupation, Father's Education, Number of Siblings. For instance consider the equation:

$$Y = a + b_1E + b_2F + b_3A \qquad (2)$$

where Y and E are the same as before, F is father's occupation, and A is the educational attainment of the respondent. The change in the ethnic effects (b_1) from Model 1 to Model 2 is due to the differential distribution of the ethnic groups by Father's Occupation and Education. The resulting net coefficients of ethnicity in Model 2 are the effects not mediated by these two other variables. The form of the equation in Model 2 assumes additive relationships of Education and Father's Occupation to Occupational Attainment across ethnic groups.

If one wants to test the hypothesis of different slopes of occupation on education among the different ethnic communities, it is necessary to expand the basic model with additional interaction terms. This is shown in Model 3.

$$Y = a + b_1E + b_2F + b_3A + b_4EA \qquad (3)$$

where all variables are as before and EA represents a series of dummy variables of each ethnic category times the education variable. If the variance explained by Model 3 is significantly greater than by Model 2, one can interpret the b_4 coefficients as the impact of differential educational slopes on occupation, net of the additive educational variable.

As the reader can see, this sort of model building can quickly become very complicated in both the statistical methods and in the interpretation of results. Yet the basic ideas that underlie such an approach remain rather straightforward. The underlying question is always the same, What social background characteristics explain the differential socioeconomic

attainment of ethnic groups?. Part of the effects of differential social background may represent the legacy of past discrimination while the unexplained residual differences are due to other factors -- most likely discrimination. This approach can also be used to address whether differential socioeconomic attainments by ethnic communities are mediated by or uniquely due to social psychological variables such as ambition. The empirical assessments of this hypothesis in American society have not supported the widespread belief that differential cultural orientations across ethnic communities account for their varying degrees of socioeconomic success (Featherman 1971; Duncan and Featherman 1972).

EXTENSIONS OF MODELS OF ETHNIC STRATIFICATION

In their basic form, these quite elaborate models of ethnic inequality do not address the issues raised by some of grander theories of race and ethnic relations. First, these models only address one aspect of ethnic relations -- socioeconomic inequality. Moreover, these models only specify the relative impact of social background variables on inequality and provide indirect measures of specific forms of discrimination. The content of the grander theories specified (or attempted to specify) the societal conditions or social structure that gave rise to relationships between ethnicity and other variables and changes in these relationships. Of course, the lack of standardized methodology to accompany these theories has greatly inhibited their potential impact on empirical research. However, it is possible to extend the basic models with longitudinal and comparative data to address some aspects of broader theoretical formulations. I will outline the direction of these extensions, first considering models of changes in ethnic inequality over time, and second the comparative analysis of social structure upon ethnic inequality.

Changes in Ethnic Stratification

In spite of the diminished position of Park's original race relations cycle hypothesis, the eventual end-state of assimilation has remained a useful empirical expectation for trends of ethnic inequality. The hypothesis is that modernization and industrialization will gradually weaken the importance of ethnic, racial, and other ascriptive criteria, and lead to a stratification system with an emphasis on achieved characteristics. The logic of this hypothesis rests on the assumption that industrial society has certain functional needs that can only be satisfied by rational decision making (for the classic exposition, see Kerr, Dunlop, Harbison, and Myers 1964),and that discrimination on the basis of religion, language, and ethnicity are primordial sentiments, are counter-productive, and will diminish over time. This hypothesis is implicit in the literature on "structural assimilation" and "institutional disperation" (Taeuber and Taeuber 1965; Eisenstadt 1953; Lieberson 1963). Although not directly focused upon ethnic stratification, Treiman's (1970) arguments in his summary of propositions dealing with the process of stratification during the course of industrialization clearly support the thesis that ethnicity and race, like all other ascriptive criteria, will become less important as determinants of socioeconomic achievement as economic development proceeds.

The "rise of ethnicity" including persistent racial and ethnic divisions in post-industrial societies has given pause to some of the more general assumptions of this school of thought -- that industrialization will weaken the structure of ethnic inequality (see Glazer and Moynihan 1970; Greeley 1974). There is also a counter-literature that questions the

general thesis on both theoretical and empirical grounds. Blumer (1965) strongly challenged the hypothesis that industrialization will necessarily lead to a reduction of racial/ethnic inequality or conflict. He said it would be more likely that the structure of industrialization will adapt to the existing racial institutions and mores rather than the other way around. Other theoretical perspectives posit that social change leads to growing inter-ethnic conflict and competition as traditional arrangements break-down (van den Berghe 1967), but the expected trend of ethnic inequality remains vague. Another important challenge comes from Marxist critics who have formulated alternative theoretical perspectives that specify how ethnic divisions can be maintained and strengthened through the normal processes of uneven capitalist development. These critics have argued theoretically and demonstrated empirically that ethnic and racial divisions can be long maintained in industrial-capitalist societies via structures of regional inequality and dual labor markets (Bonacich 1972, 1976; Hechter 1971, 1974).

At present this debate is pretty much of a standoff. A plausible theoretical case can be made for either interpretation, and selective evidence can be brought to bear in support of both sides. While it would be premature to suggest that this debate over the effects of social change on ethnic stratification can be resolved with the models described in the previous section, it is clearly possible to extend them to measure trends in ethnic stratification systems. For instance, to the extent that the net effects of ethnicity (an indicator of discrimination) on socioeconomic status decrease over time, one might argue that the system is becoming "blind" with respect to ethnic status -- thus supporting the

industrialization thesis. Or if the differential slopes of occupation on education across ethnic communities persist undiminished, then one might question the convergence or assimilation hypothesis.

The fundamental prerequisite for such assessments of changes in ethnic stratification (or any study of social change) is comparable data for two or more time points. A significant study in this regard has been Featherman and Hauser's (1976) analysis of changes in racial stratification in the United States from 1962 to 1973. With the aid of replicated survey data, they could examine the socioeconomic origins and attainments of blacks and whites of successive cohorts, holding age constant. They found modest evidence in support of the industrialization thesis, with the process of stratification among young black men becoming quite similar to that of young white men in recent years. Convergence was still far from being realized and changes were minimal among older age groups, but movement in the hypothesized direction had clearly occurred. It can be anticipated that work along these lines expand and models will be refined in the coming years. There is already a tremendous scientific and policy interest in the trend in black-white inequality in the United States (Farley and Hermalin 1972; Farley 1977), and the growing availability of comparable time-series data will certainly spark creative attempts to formally "model" the dynamics of ethnic change (Winsborough 1975; Mason, Taeuber, and Winsborough 1977).

Even if these longitudinal models succeed in documenting changes (or non-change) in ethnic stratification systems over time in the United States or other societies, we will still be left with uncertainty over the reasons for the change. It may be possible to rule out some explanations, by noting the relative impact of various variables in the models.

For instance, changes in the composition of social origins of ethnic/racial groups does not require any reference to societal changes that affected the education-occupation-income relationships of adults in the population. But if discrimination (intercepts and slopes) seems to have lessened its impact, there are a wide variety of competing explanations -- a tightening labor market, government policies to restrict discrimination, or the growth of jobs in new sectors. Clearly, the links between social structure and ethnic stratification can only be indirectly examined through trend analysis. But there are ways to build models with explicit links between social structure and ethnic inequality.

Comparative Models of Ethnic Stratification

The plea for comparative research is one of the frequent, but neglected tasks within sociology, and in the social sciences generally. The basic requirement for comparative research is comparable data from different societies or communities. For researchers who work within a quantitative research orientation, as exemplified in the model construction strategy, this requirement is almost never satisfied. Even in rare cases, when comparative quantitative analysis is attempted, the comparisons are limited to a small number of cases, two, three, or four societies. Since different patterns in two countries may result from an almost infinite variety of other societal differences, explanations are always speculative. The situation is much like that of trend analysis, where differences can be described, some explanations can be ruled out, but conclusive explanations (linkages of social structure to patterns of ethnic stratification) remain rare.

However, a new approach to comparative analysis, and models of ethnic stratification, is possible with the dissemination of massive data files,

such as large samples from national censuses. Such large data files make it possible to divide the population into a number of meaningful geographical areas that vary along structural characteristics that may affect the process of socioeconomic attainment among ethnic communities. In a sense, this type of work is already part of mainstream sociological research with the use of ecological variables.

For instance, size of place of residence (or size of birthplace) is a critical variable that is associated with availability of opportunities. Larger towns and cities are thought to provide more opportunities based upon achieved, rather than ascribed characteristics relative to small towns and rural areas (although empirical studies cast doubt on this hypothesis, see Mueller 1977). The introduction of geographical variables always requires a simultaneous consideration of migration, for the effects of a community may be different for in-migrants and natives. In addition to size of place, the most common ecological variable is region. Studies of racial inequality in the United States have shown that patterns varied considerably between the South and the non-South (Hogan and Featherman 1977).

But the opportunities to measure the ecological effects go far beyond just urbanization and region. With extremely large data files, it is possible to create contextual variables of community structure that may influence the patterns of ethnic stratification. The appropriate geographical unit may vary according to the availability of data and the type of hypothesis, but metropolitan areas which closely approximate labor markets seem like a good choice. By constructing contextual variables of community structure, such as size, growth, composition, etc., one can specify

and directly measure the impact of social structural variables upon ethnic stratification systems. The form of the model-building for such an analysis could be built upon the previous efforts in measuring the effects of neighborhoods and schools upon academic achievement (Sewell and Armer 1966; Hauser 1969, 1971). While the variables would be quite different, the logic and methods of incorporating both individual social background variables and ecological variables in the same models would be similar.

The idea of incorporating ecological characteristics into models of ethnic inequality is not entirely original. There is a long tradition of research that seeks to explain black-white disparities in terms of the relative size of the minority population in the community (Blalock 1957; Brown and Fuguitt 1972; Frisbie and Neidert 1977). In their analysis of development towns in Israel, Spilerman and Habib (1976) point out that the industry structure of towns shapes the distribution of occupational opportunities. And if ethnic groups are differentially distributed across towns, as is the case almost everywhere, ethnic inequality is partially a function of community characteristics. In a similar vien, Yancey, et al. (1976) offer a revisionist perspective on ethnicity among European immigrants to the United States. They argue that ethnicity is largely a function of the structural conditions of American cities at the time of their arrival. Different ethnic groups are tied into a particular industrial-occupational structure as a result of the opportunities that are available to them.

The task ahead for a research focus on the effects of community structure on ethnic inequality is the development of specific hypotheses that are testable with extant data. For instance, one might posit that

the percent of employment in the manufacturing sector in a city is positively related to ethnic equality. Or perhaps, the percent of the population which are high school graduates may be a key variable. Further examples will undoubtedly come to the mind of the reader.

There is an empirical possibility that most cities in the United States are so similar in terms of labor market diversity that community effects will be insignificant. In fact, one recent study reported there was too little inter-city variation in black-white inequality in the U.S. to merit further inquiry (Stolzenberg and D'Amico 1977), but both the theoretical and empirical questions remain in dispute (Spilerman and Miller 1977).

One might argue that the comparative analysis of communities on regions within one country will hold constant many of the critical structural variables that shape stratification systems — namely political institutions. This limitation is clearly acknowledged, but that should not be an argument against pursuing research on community effects within societies.

CONCLUSIONS

Theories of racial and ethnic relations have been plentiful, but the empirical testing of hypotheses has not led to a cumulative growth of knowledge. Disparate research findings from various studies increase in number, but do not seem to bear much relationship to one another. It is obvious that a strong paradigm of research has not emerged. But the growth of empirical studies of racial/ethnic inequality in the United States over the last decade suggests that formal models of the process of stratification may be a significant turning point in the development of the field.

Not only do such models offer a rigorous statistical method of analysis, but a cumulative research tradition seems to be developing. The more simple models were formulated to measure the relative amount of discrimination in overall measures of inequality. But the expansion of these models to include social origins and a full temporal ordering of the socioeconomic career required a casual specification and interpretation of how ethnic inequality is generated and transmitted across and within generations.

The "openness" of such models to the inclusion of other variables, and the requirement of a theoretical rationale for each relationship between variables in the system, encourages the development of a cumulative research strategy. The two major frontiers of research on ethnic stratification within this emergent paradigm are trend and comparative analysis. Trend analysis will speak to the question of whether there is a growing convergence in ethnic stratification, as suggested by the hypothesis that modernization leads to assimilation. While the extensions of models of inequality to temporal changes will show the mechanisms whereby inequality is maintained or reduced, it may not measure the direct links of social structure upon the stratification process.

But via comparative analysis, one can specify certain attributes of the social structure of geographical areas or cities (e.g., low unemployment, diverse industrial structure, strong affirmative action programs, etc.), that may affect the levels and processes of ethnic stratification. Such studies are increasingly possible with the availability of very large data files to measure geographic areas and ecological characteristics. In another decade or so, we may see development of a strong research paradigm for the study of race and ethnic stratification.

FOOTNOTES

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2. Much of the prior literature is phrased in terms of race; I prefer the more general term, ethnicity which has fewer pejorative interpretations. Depending on prior usage by other authors, I will use the two terms interchangably.

3. Thus illustrating the principle of weak ergodicity, a familiar idea to statisticians. For an overview of the potential applications of the matrix equation representation of social mobility, see Matras 1967.

REFERENCES

Althauser, Robert P. and Michael Wigler. 1972. "Standardization and Component Analysis." Sociological Methods and Research 1: 97-135.

Barth, Ernest and Donald Noel. 1972. "Conceptual Frameworks for the Analysis of Race Relations: An Evaluation." Social Forces 50 (March): 333-348.

Blalock, Hubert M. 1957. "Percent Nonwhite and Discrimination in the South." American Sociological Review 22 (December):677-682.

_____. 1967. Toward a Theory of Minority Group Relations. New York: Wiley.

Blau, Peter and Otis Dudley Duncan. 1967. The American Occupational Structure. New York: John Wiley and Sons.

Blumer, Herbert. 1965. "Industrialization and Race Relations." Pp. 220-253 in Guy Hunter (ed.), Industrialization and Race Relations. London: Oxford University Press.

Bonacich, Edna. 1972. "A Theory of Ethnic Antagonism: The Split Labor Market." American Sociological Review 37:547-559.

_____. 1976. "Advanced Capitalism and Black/White Relations in the United States." American Sociological Review 41: 34-51.

Brown, David L. and Glen V. Fuguitt. 1972. "Percent Nonwhite and Racial Disparity in Nonmetropolitan Cities in the South." Social Science Quarterly 53 (December):573-582.

Duncan, Beverly and Otis Dudley Duncan. 1968. "Minorities and the Process of Stratification." American Sociological Review 20:210-217.

Duncan, Otis Dudley. 1966. "Path Analysis: Sociological Examples." American Journal of Sociology 72 (July): 1-16.

_____. 1969. "Inheritance of Poverty or Inheritance of Race?" Pp. 85-110 in Daniel P. Moynihan (ed.), On Understanding Poverty: Perspectives From the Social Sciences. New York: Basic Books.

Duncan, Otis Dudley and David Featherman. 1972. "Psychological and Cultural Factors in the Process of Occupational Achievement." Social Science Research 1 (June):121-145.

Duncan, Otis Dudley, David Featherman, and Beverly Duncan. 1972. Socioeconomic Background and Achievement. New York: Seminar Press.

Eisenstadt, S. N. 1953. "Analysis of Patterns of Immigration and Absorption of Immigrants." Population Studies 7 (November):167-180.

Farley, Reynolds. 1977. "Trends in Racial Inequalities: Have the Gains of the 1900s Disappeared in the 1970s?" American Sociological Review 42: 189-207.

Farley, Reynolds and Albert Hermalin. 1972. "The 1960s: A Decade of Progress For Blacks?" Demography 9:353-370.

Featherman, David. 1971. "The Socioeconomic Achievement of White Religio-Ethnic Subgroups: Social and Psychological Explanations." American Sociological Review 36 (April):207-222.

Featherman, David and Robert M. Hauser. 1976. "Changes in the Socioeconomic Stratification of the Races, 1962-1973." American Journal of Sociology 82:621-651.

Frazier, E. Franklin. 1957. Race and Culture Contacts in the Modern World. Boston: Beacon Press.

Frisbie, W. Parker and Lisa Neidert. 1977. "Inequality and the Relative Size of Minority Populations: A Comparative Analysis." American Journal of Sociology 82 (March):1007-1030.

Glazer, Nathan and Daniel P. Moynihan. 1970. Beyond the Melting Pot. 2nd Edition. Cambridge: MIT Press.

Greeley, Andrew. 1974. Ethnicity in the United States: A Preliminary Reconnaissance. New York: Wiley.

Hauser, Robert M. 1969. "Schools and the Stratification Process." American Journal of Sociology 74 (May):586-611.

_____. 1971. Socioeconomic Background and Educational Performance. Arnold M. and Caroline Rose Monograph. Washington, D.C.: American Sociological Association.

Hechter, Michael. 1971. "Towards a Theory of Ethnic Change." Politics and Society 5: 21-44.

_____. 1974. "The Political Economy of Ethnic Change." American Journal of Sociology 79:1151-1178.

Hirschman, Charles. 1975. Ethnic and Social Stratification in Peninsular Malaysia. Rose Monograph Series. Washington, D.C.: American Sociological Association.

Hogan, Denis P. and David L. Featherman. 1977. "Racial Stratification and Socioeconomic Change in the American North and South." American Journal of Sociology 83:100-126.

Kerr, Clark, John T. Dunlop, Frederick Harbison, Charles A. Myers. 1964. Industrialism and Industrial Man. New York: Oxford University Press.

Kitagawa, E. M. 1955. "Components of a Difference Between Two Rates." Journal of the American Statistical Association 50:1168-1194.

Lieberson, Stanley. 1961. "A Societal Theory of Race and Ethnic Relations." American Sociological Review 26:902-910.

_____. 1963. Ethnic Patterns in American Cities. New York: Free Press.

Lieberson, Stanley and Glenn Fuguitt. 1966. "Negro-White Occupational Differences in the Absence of Discrimination." American Journal of Sociology 75:188-200.

Lyman, Stanford. 1968. "The Race Relations Cycle of Robert Park." Pacific Sociological Review 11: 16-22.

Mason, William M., Karl E. Taeuber, and Halliman H. Winsborough (eds.) 1977. Old Data for New Research: Report of a Workshop on Research Opportunities and Issues in the Design and Construction of Public Use Samples From the 1940 and 1950 Censuses and From Current Population Surveys From 1960 Forward, Held in Madison Wisconsin, June 28-30, 1976. Center for Demography and Ecology, University of Wisconsin, Madison.

Matras, Judah. 1967. "Social Mobility and Social Structure: Some Insights From the Linear Model." American Sociological Review 32 (August): 608-614.

Mueller, Charles. 1977. "Socioeconomic Achievements and City Size." Pp. 249-270 in Robert M. Hauser and David L. Featherman, The Process of Stratification: Trends and Analyses. New York: Academic Press.

Noel, Donald. 1968. "A Theory of the Origin of Ethnic Stratification." Social Problems 16 (Fall): 152-172.

Park, Robert. 1950. Race and Culture. Glencoe, Illinois: The Free Press.

Schermerhorn, Richard A. 1970. Comparative Ethnic Relations, New York: Random House.

Seigel, Paul. 1965. "On the Cost of Being a Negro." Sociological Inquiry 35:41-59.

Sewell, William H. and Michael Armer. 1966. "Neighborhood Context and College Plans." American Sociological Review 31:159-168.

Shibutani, Tamotsu and Kian M. Kwan. 1965. Ethnic Stratification: A Comparative Approach. New York: MacMillan.

Spilerman, Seymour and Jack Habib. 1976. "Development Towns in Israel: The Role of Community in Creating Ethnic Disparities in Labor Force Characteristics." American Journal of Sociology 81 (January):781-812.

Spilerman, Seymour and Richard E. Miller. 1977. "City Nondifferences Revisited." American Sociological Review 42 (December):979-983.

Stolzenberg, Ross M. and Ronald J. D'Amico. 1977. "City Differences and Nondifferences in the Effect of Race and Sex on Occupational Distribution." American Sociological Review 42 (December):937-950.

Taeuber, Karl E. and Alma F. Taeuber. 1965. "The Negro as an Immigrant Group." American Journal of Sociology 69:374-382.

Treiman, Donald J. 1970. "Industrialization and Social Stratification." Pp. 207-234 in Edward O. Laumann (ed.), Social Stratification: Research and Theory for the 1970s. New York: Bobbs-Merrill.

van den Berghe, Pierre. 1967. Race and Racism: A Comparative Perspective. New York: Basic Books.

Winsborough, H. H. 1975. "Age, Period, Cohort and Education Effects on Earnings By Race." Pp. 201-217 in Kenneth C. Land and Seymour Spilerman (eds.), Social Indicator Models. New York: Russell Sage.

Winsborough, H. H. and Peter Dickinson. 1971. "Components of Negro-White Income Differences." Proceedings of the American Statistical Association, Social Statistics Section.

Yancey, William L., Eugene P. Ericksen, and Richard N. Juliani. 1976. "Emergent Ethnicity: A Review and Reformulation." American Sociological Review 41:391-402.